

### Abstract

An activated carbon/metal oxide filter element is disclosed. The filter element may be prepared by blending an activated carbon, a metal oxide, and a binder to form a filter media  
5 mixture, shaping the filter media mixture into a filter body. The filter body may be calcined to form a filter element. The activated carbon/ metal oxide filter element may be used to remove odorous compounds, acidic gases, and volatile organic compounds from a gas.